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ECONOMIC CRISES AND STOCK SECURITY VALUES

By ARTHUR SELWYN-BROWN, M.A., Ph.D.,
New York City.

The developments of modern science have conclusively shown that changes in nature are not brought about in direct, but always in indirect ways. All progress, and consequently, all motion, follows a zigzag or cyclic path, rather than a straight one. In other words, the trial and error method, that is followed alike by nature and by man in the determination of changes, results in a complex of cyclic or periodic phenomena. Herbert Spencer was one of the first to emphasize the fact, that whenever there is a conflict of forces that are not in equilibrium, there will be rhythmic action engendered. But if the antagonistic forces are balanced at any one point, rest will be induced. A perfect balance of forces, or rest, hardly ever exists. Evolutionary developments are rhythmical, and, consequently, when mapped present spiral or periodic effects. There are always noticed advances and retardations, action and reaction, from which progressive epochs are differential resultants. A study of these phenomena enabled Spencer¹ to describe the law of organic and inorganic evolution as the "change from an indefinite, incoherent homogeneity, to a definite, coherent heterogeneity, through continuous differentiations and integrations." If we accept the evolutionary theory and its corollary that life is but a form, or a stage, of motion, we will have little difficulty in understanding the periodicity and other phenomena of commercial crises. These crises are the resultants of mental disturbances of social bodies, either local, national, or international. They affect a limited area like a town or nation, or are world-wide in their manifestations. In their larger aspects they are of celestial origin and accompany climatic changes. A study of their economic aspects, however, does not necessitate any reference to extra-mundane causes.

Crises are essentially psychological phenomena. They result from fear, and mark the ends of reactions from periods of inflated prices and credits. They indicate the low swings of the evolutionary

¹ Herbert Spencer, "First Principles," Chapter XI.

pendulum during periods of price readjustment. Commercial crises are usually divided into two classes, each of which is again subdivided. We may generally distinguish crises as belonging to one or other of the following divisions, although the dividing lines are not always clearly marked:

1. *Currency crises.*

- (a) Congestion of the circulating medium.
- (b) Over-issue of paper currency.

2. *Capital crises.*

- (a) Over-speculation.
- (b) Over-production and stocking.

The main divisions are also commonly distinguished as financial and over-production crises. The subdivisions mark the predominant features of each crisis. When there is a financial crisis with strong evidence of an extensive circulation of bank notes, the crisis will be best classed as an over-paper issue financial crisis. When over-speculation, or over-production, are the predominant features of a panic, the crisis will be classed in a suitable subdivision of the second division. Each of the subdivided crises exhibits characteristics shared by all crises and some that are peculiar to its own class.

During the interval between one commercial crisis and the next one the following cycle of business phases may be noticed: Depression, improvement, rapid improvement, general prosperity, excitement, over-trading, excessive speculation and company promotion, fear and apprehension, pressure to sell at lower rates, dullness, panic, and general business depression. These phases correspond with similar psychological features in public sentiment.

Man is a social being. He loves company. Sociologists distinguish four types of men: The austere, forceful, convivial, the rationally conscientious. Whenever a majority of any community is classifiable under one of these divisions, we have an austere people; a forceful, active people; a convivial people, fond of good living; or a conservative people. Most communities belong to the third type, and the people are easy-going and prone to suggestion and imitation. In all communities there are numbers of people who are naturally pessimistic, but who love to follow optimists. Now, crowd leaders, to be successful, must be active, forward, hopeful men. They must be optimists. The civilization of the

world has been and must continue to be developed and spread by optimistic and indomitable individuals. The pessimist rarely benefits mankind. When he does confer a benefit he usually does so in the form of criticism.

The chronic pessimist is usually a mere dreamer or a nihilist or other destructor. His morbidity prevents him being a good constructor. The pioneers and leaders of business are strong optimists. They gather followers through suggestion, sympathy, and imitation. Their hopefulness leads to activity and their activity commands success. Their success is envied by others and their work and operations are imitated. They infect all beholders with their hopeful sentiments. Most men are moved more by sentiment than by judgment, by imitation rather than by thinking. Consequently impression and fascination always tend to inspire imitation. In speaking of public opinion Holtzendorff well says that, "The public opinion of the masses is not as a rule the result of careful investigation and sifting of facts. The ideas that little by little, as occasions arise, establish themselves in public opinion are produced by a great multitude of forces that are themselves the resultants of other conflicting forces. The social rôle of the instinct for imitation is important, not only in regulating the external activities of society, the forms of social intercourse, and clothing, but also its opinions and beliefs. The majority of men in society readily imbibe and absorb their opinions from whatever sources most frequently and emphatically express them."²

Whenever the public opinion leaders in any given society become so active and hopeful as to compel all the members of their community to imitate their example, the businesses and industries of that community will reflect such psychological phenomena. There will be a great amount of trading and speculation while prices and trade records will soar to higher levels. Periods of inflation will be induced. Merchants will over-stock, manufacturers will over-produce, investors will over-speculate, and bankers will over-extend credit. But in time momentum will be lost. There will be a temporary dullness in trade. Later, some of the financial leaders in the community will observe that the commercial pendulum has reached its utmost limit in the upward beat, and is about to revert to a downward beat. They will then discount the future course

²Franz Holtzendorff, *Oeffentliche Meinung*, page 93.

of events by selling their goods or, when possible, selling short, or for future delivery. These transactions will as time progresses be followed by others, until sufficient momentum is established to give the swing of trade a pronounced downward trend. But a large proportion of men at first fight against changed conditions. They suffer losses, but hold on to their remaining stocks, hoping for business to improve again. Finally, prices decrease so much that panic seizes them and they run together and sacrifice their goods at whatever prices offer. Such activity usually precipitates a general commercial and financial panic. This explains how it comes about that every panic is preceded by some years of the most intense business activity and speculation, and is followed by periods of commercial stagnation and restricted credits. Then the cycle is repeated again endlessly. When the progress of the world over any long interval of time is plotted, the resulting curve will be found to present many irregular undulations and up-and-down movements indicating periods of action and reaction, of optimism and pessimism. But the movement will be a climbing one in the nature of a spiral. This is in accordance with the law of advancement in evolution that is generally described as the universal struggle toward perfection.

Commercial crises have been experienced at comparatively regular periods since early historic times. The most noteworthy panics in recent times were experienced in Europe in 1701, 1711, 1721, 1731, 1742, 1752, 1763, 1773, 1783, 1793, 1804, 1815, 1825, 1837, 1847, 1857, 1866, 1873, 1878, and 1890. In the United States, the most important panics occurred in 1812, 1818, 1825, 1837, 1847, 1857, 1869, 1873, 1877, 1884, 1890, 1893, 1903, and 1907.

Various theories have been elaborated to explain the periodicity of commercial crises and panics. The two principal ones are those of J. S. Mill and W. S. Jevons. Mill's theory is that after the reverses in business caused by a crisis have warned commercial communities of the dangers arising from extravagance and unsound business methods, it requires a comparatively definite period for the losses to be made good, and the memory of their harmfulness to be modified. Mill held the opinion that the changes in mental attitudes of commercial communities toward business conditions and credit methods that occur in the interval between a crisis and the following boom period require a comparatively definite interval of

time for their accomplishments. It is a psychological phenomenon and can be measured by psychological methods.

Jevons attempted, with doubtful success, to connect the periodicity of market phenomena with the periodicity of sunspots. He was of opinion that the periodical upheavals in the sun's atmosphere signified extraordinary celestial heat changes which caused remarkable climatic disturbances on the earth, that, in turn, modified the productiveness of agriculture and the pastoral industries on which so much of the world's trade is based.

Strong objections can be raised to both Mill's and Jevons's theories. Neither is true. But each contains elements of the truth. Crises and booms mark the excesses of social communities in their financial and commercial transactions. They are the objective phenomena of psychological changes and correspond to the collective feelings of exhilaration and depression, optimism and despondency, freshness and fatigue of communities. Obviously no theory can be framed to measure accurately the interval between phenomena dependent upon such elusive matters as psychic states and sociological conditions of large communities. These are themselves modified by a variety of circumstances and do not recur at any regular interval. Notwithstanding this, however, crises and booms are always accompanied by certain well-defined financial and commercial phenomena, and by studying these their approaches can usually be ascertained well beforehand with a good degree of accuracy.

Successful financial operations are invariably based upon accurate forecasts of the business outlook of the future. The truth of this is acknowledged by the writers on the stock markets who assert that prices always discount the future. The price fluctuations on all markets reflect business conditions, but, for general purposes, the variations on the stock exchanges, both in prices and transactions in stocks and bonds, afford the most sensitive and accurate barometers of commercial tendencies. Operations on the stock markets are very intimately connected with banking and commerce. The leading investors on the stock exchanges are among the largest bankers, corporation directors, and business men in the country. These men are in close touch with developments, not only with every portion of the country, but with Europe also. Through their agents and information bureaus, they are able to

watch every small change in corporation earnings and expenditures, crop values and prospects, political conditions, the state of monetary supply, prospects of tariff changes, domestic and foreign trade, commercial credit and other factors contributing to business stability. They are the first to see the cloud specks in the financial horizon that are the harbingers of the causes of the great cyclic price swings moving in unison with the long cycles in trade and industry between boom and panic periods. They are the great discounters of the future, and their operations in lowering the prices of their goods for sale, restricting their credits, calling their loans, selling out their stock securities, and restricting their business operations in times of general optimism, and their reversal of these operations in times of panic and depression, assist the reversal of the swing of the cyclic pendulum and contribute to the reversal of price changing tendencies.

Confining attention to the effects of commercial crises on stock security prices, it should be first noted that a distinction should be made between price and value. The price of a stock is the money it will sell for, or can be bought for, at any particular time. It is generally influenced by the demand and supply, or commercial conditions, existing when a specific quotation is made. Value, on the other hand, relates to the quality of the stock for income-producing purposes. It depends on the substantialness of the security, its future prospects, class of business done by the corporation, character of the management, and the rate of return as compared with the average yield of high-class securities. The intrinsic value and market price of any particular stock exchange security are often very far apart, and it is upon a proper recognition of this that many successful financial men and bankers found their wealth. It should be borne in mind, also, that stock exchange panics do not cause commercial crises as is popularly assumed. All such crises are accompanied by depressed stock prices; but the depreciation in values is a concomitant of crises, not a cause. The fall in stock prices on the New York stock exchange in October, 1907, commenced a few days before the suspension of payments by the banks, but did not cause such suspensions. The crisis was largely brought on by over-speculation, credit abuses, and currency inflations in 1905 and 1906. The panics on the stock exchanges of the United States in October and November, 1907, indicated the extremities

of the downward movement of the price pendulum from its extreme upward movements in September and October, 1906.

Business progresses in regular cycles that run in the following order: (1) Trade and financial depression, money in plentiful supply at low rates; (2) increased commercial activities, money in better demand; (3) money surpluses commencing to diminish; a more optimistic sentiment prevails in business circles, new commercial undertakings are planned; (4) labor is in good demand, all the manufacturing and transportation companies report their plants are in full operation, there is a good demand for loans at rising rates, the proportion of banking reserve to liabilities diminishes rapidly; (5) there is a mania for speculation in lands and stocks, much public and private extravagance, the banks are over-extended and in a very weakened condition, company promotion is rampant; (6) bankers become apprehensive, call loans, restrict credit, realize on securities, and call a halt in business expansion; (7) there is a period of dullness, then a panic, followed by a depression. The cycle is then repeated.

The passage of commercial conditions from a crisis and panic to the top of its succeeding boom is measured by statistics relating to: (1) *Banking*, showing proportion of reserve to liabilities, nature of transactions, number of transactions, circulation, loans, clearings, and money rates; (2) *customs returns*, showing imports and exports; (3) *agricultural returns*, showing area under crops and estimated yields; (4) *wholesale business*, showing amount of trade done by leading wholesale and manufacturing firms, particularly those of the textile, woolen and hardware houses. Their transactions indicate views of the business outlook for the immediate future held by retail firms throughout the country; (5) *building and real estate activities*; these always give greater figures nearer the top of a boom; (6) *commercial credit*, as shown by the number of cases of insolvency and bankruptcy, and sums involved; (7) *labor conditions*, showing unemployment and emigration movements; (8) *railroad conditions*, particularly traffic returns, earnings, dividends, number of idle cars, condition of tracks and rolling stock; (9) *commodity price movements*, as shown by index numbers; (10) *stock exchange transactions*, including the number of stocks and bonds sold daily, average price changes, and new securities listed; (11) *foreign money rates and business returns*.

The development of international commerce in recent years has been enormous. In consequence of this, the commercial conditions in each country are reflected in others in a greater or less degree, depending on the relationship of the commercial communities of each. All large merchants and investors, for this reason, keep well posted in foreign news.

Speculation in all forms is the result of foresight, and early appreciation of coming changes. Successful speculation is rarely the result of chance. It is generally based on a thorough knowledge of financial and commercial conditions. The financiers who manage large campaigns on the stock markets plan their campaigns as carefully as generals of armies before engaging in a war, or of railroad corporations before committing themselves to the building of expensive engineering works. The advice of prominent bankers and merchants is always sought. The fullest statistical data relating to the subjects given above are collected and tabulated by trained statisticians. Upon a study of these data stock market operations are planned. When fundamental business conditions are healthy, stocks and bonds are purchased; when conditions are unsound, stocks are sold short in anticipation of lower prices. It is in consequence of the great amount of study the leading financial authorities give to fundamental business transactions and the unerring manner in which their conclusions are reflected upon the world's stock markets, that the stock markets have become such sensitive and accurate barometers of commercial and financial conditions. It is also through a lack of understanding of these intimate relations between stock prices and the opinions of commercial leaders of coming business changes, and of the tendency of stock movements to discount the future, that the public forms wrong conclusions regarding the importance and value of stock exchange operations. This popular misunderstanding of the causes of the sensitiveness of stock exchange movements, also, is responsible for the popular illusion that leads to the belief that rapid and extensive variations in stock prices induce commercial and financial booms and crises.

When the average prices of representative stocks actively traded in on the stock exchange are taken for a series of years and plotted, it will be noticed that the curves advance and decline

in a comparatively symmetrical manner. Usually each year a decline will be observed in January or February. This will be followed by a strong spring rise, and a fall in October, November or December. The spring rise anticipates the crop returns, and the strength of the rise is dependent upon general commercial, financial and climatic conditions, and the outlook and value of the crops. When the harvests are good, and money is in good supply, the spring rise in stock prices is often continued into the summer. But if the crops are poor, and money rates are high, the stock markets react in summer.

In the fall months, money is required by the agriculturists in large quantities for wages and other expenses. Money rates are usually high at this time. A certain number of security holders are always compelled to realize on them whenever money is in short supply. This selling lowers prices, and induces what are known as the fall market reactions. These price movements are greater in stocks than in bonds. It is largely through money movements from the cities to the agricultural districts causing monetary stringencies that the greatest declines and panics on the stock exchanges occur in the early summer or late fall months. Favorable crop outlooks generally cause the greatest activity on the stock exchanges, and booms in business, to occur on the top of a spring rise in prices. When prices have steadily risen for several years, and in spring, transactions on the stock exchanges reach extraordinary figures, banking returns show greatly extended credits and poor reserves, foreign imports are much greater than exports, and investors exhibit a speculative frenzy; there is a strong probability that the upward swing of the price pendulum is culminating, and that a sharp decline of from fifteen to twenty per cent. in stock prices is at hand. The main trend of prices will continue downward, excepting for repeated rallies, until in a year or two a panic will ensue that will cause prices to fall so low that new investment buying on a large scale will be induced by the bargains offered. This will stop the downward momentum of the pendulum and cause it to change its beat. Such great stock exchange panics generally accompany general commercial crises. There is usually no exact correspondence between the average rise and fall between a series of cycles in trade. The low prices of

stocks during commercial crises have a higher average value, as a rule, than those of preceding crises. The same is true of the average of prices in boom periods. There is everywhere a tendency for prices to seek higher levels. All prices rise proportionately with the advancement of civilization and social well-being, and in correspondence with the growth of wealth.